

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference C04039 KJB:PMC:PRB	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/AU2004/000397	International filing date (<i>day/month/year</i>) 29 March 2004	Priority date (<i>day/month/year</i>) 3 April 2003
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ F21V 23/04 F21L 4/08		
Applicant EVEREADY BATTERY COMPANY, INC. et al		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of 4 sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: <div style="margin-left: 20px;"> a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 3 sheets, as follows: <div style="margin-left: 20px;"> <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. </div> </div> <div style="margin-left: 20px;"> b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). </div>
4.	This report contains indications relating to the following items: <div style="margin-left: 20px;"> <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input checked="" type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application </div>

Date of submission of the demand 3 December 2004	Date of completion of the report 17 March 2005
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorised Officer ROSS BURDON Telephone No. (02) 6283 2605

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23:1 (b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1 - 13 as originally filed/furnished
 - pages* received by this Authority on with the letter of
 - pages* received by this Authority on with the letter of
- ☒ the claims:
- pages 14 as originally filed/furnished
 - pages* as amended (together with any statement) under Article 19
 - pages* 15 - 17 received by this Authority on 3 December 2004 with the letter of 3 December 2004
 - pages* received by this Authority on with the letter of
- ☒ the drawings:
- pages 1/13 - 13/13 as originally filed/furnished
 - pages* received by this Authority on with the letter of
 - pages* received by this Authority on with the letter of
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to the sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to the sequence listing (*specify*):

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims 1 - 39	YES
	Claims	NO
Inventive step (IS)	Claims 1 - 39	YES
	Claims	NO
Industrial applicability (IA)	Claims 1 - 39	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)Citations

WO 2000/029780

WO 2001/061244

NOVELTY (N) & INVENTIVE STEP (IS) Claims 1 to 39

Claims 1 to 30: none of the discovered prior art discloses or suggests, either alone or in obvious combination, to a person skilled in the art, a cover in a lighting device that extends over an electrical switch and indicator through which the indicator means can be visible when it is illuminated.

Claims 31 to 39: none of the discovered prior art discloses or suggests, either alone or in obvious combination, to a person skilled in the art, a waterproof seal for a charging pathway through an aperture in a lighting device that uses a securement means to place a resilient sealing means under compression.

The invention defined by claims 1 to 39, as amended, meets the criteria set forth in PCT Articles 33(2) and 33(30) for novelty and for inventive step.

Box No. IV Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
 - ☐ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted nor paid additional fees.
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:

☐ complied with.

☒ not complied with for the following reasons:

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

1. Claims 1 to 30 are directed to a cover over an electrical switch means through which an indicator means may be visible. It is considered that this functional combination of integers comprises a first "special technical feature".
2. Claims 31 to 39 are directed to a water tight seal for a charging pathway through an aperture that uses a securement means to place a resilient sealing means under compression. It is considered that this functional combination of integers comprises a second special technical feature.

Since the above-mentioned groups of claims do not share any of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept, a priori.

4. Consequently, this report has been established in respect of the following parts of the international application:

☒ all parts.

☐ the parts relating to claims Nos.

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11. A flashlight as claimed in any one of claims 1 to 10, wherein said at least one indicator means passes through said housing.
12. A flashlight as claimed in any one of claims 1 to 11, including at least a pair of indicator means.
- 5 13. A flashlight as claimed in any one of claims 1 to 11, including three indicator means.
14. A flashlight as claimed in any one of claims 1 to 13, wherein the or each indicator means is disposed under the resilient cover.
15. A flashlight as claimed in any one of claims 1 to 14 wherein at least part of the resilient cover is translucent.
- 10 16. A flashlight as claimed in any one of claims 1 to 14 wherein at least part of the resilient cover is transparent.
17. A flashlight as claimed in any one of claims 1 to 16, wherein the cover is of an elastomeric or polymeric material.
18. A flashlight as claimed in any one of claims 1 to 17, wherein the cover includes silicon.
- 15 19. A flashlight as claimed in any one of claims 1 to 18, wherein the power source includes a rechargeable battery.
20. A flashlight as claimed in claim 19, wherein said flashlight includes connection means for connecting said rechargeable battery to an external power supply to recharge the battery.
21. A flashlight as claimed in claim 20, wherein said flashlight includes a recharging circuit, to which said indicator means is electrically connected.
- 20 22. A flashlight as claimed in any one of claims 1 to 21, wherein said indicator means is visible through said cover, when said indicator means is or is not indicating a status of said power source.
23. A flashlight as claimed in any one of the preceding claims, wherein said flashlight is a waterproof flashlight.
- 25 24. A method of providing an indicator means for a lighting device, said indicator means being adapted to provide a signal to a user of said lighting device, said device including a cover over a switch member of a switch means which will open and close a circuit between said power source and a lamp means, the cover providing a waterproof seal for the housing preventing ingress of water through the aperture, said method including the steps of:
30 providing said cover from a selection of a translucent, transparent or other see-through means; and
locating said indicator means below said cover.

25. A method as claimed in claim 24, wherein said indicator means is visible through said cover when said indicator means is providing said signal.
26. A method as claimed in claim 24 or 25, wherein said indicator means is not visible through said cover when said indicator means is not providing said signal.
- 5 27. A method as claimed in any one of claims 24 to 26, wherein said lighting device is a flashlight.
28. A method as claimed in claim 27, wherein said flashlight is a waterproof flashlight.
29. A method as claimed in any one of claims 24 to 28, wherein said at least one indicator provides an indication of one or more than one of the following: charging status; discharging status; location of the lighting device.
- 10 30. A method as claimed in claim 29, wherein location of the lighting device is produced by a bright coloured light source which is lighted intermittently or is otherwise flashing.
31. A waterproof flashlight including:
a flashlight housing defining a contact aperture opening therethrough;
15 a flashlight electrical contact for electrical connection of the flashlight to a power source, the flashlight electrical contact being disposed at least partly outside the flashlight housing and defining a shoulder adjacent the housing;
resilient sealing means sandwiched between the shoulder and the flashlight housing to establish a water tight seal between the shoulder and the housing; and
20 contact connection means for connecting the flashlight electrical contact to the flashlight housing, the contact connection means extending from the flashlight electrical contact through the contact aperture and including securement means securing the contact connection means in relation to the flashlight housing such that the shoulder maintains the sealing means under compression.
- 25 32. A flashlight as claimed in claim 31 wherein the resilient sealing means is an elastomeric washer.
33. A flashlight as claimed in claim 31 or claim 32 wherein the contact connection means includes a shaft portion extending from the flashlight electrical contact.
- 30 34. A flashlight as claimed in claim 31 wherein the securement means is disposed within the flashlight housing and is constituted by a deformable portion of the contact connection means, configured to be deformed so as to lock the contact connection means and hence the flashlight electrical contact, in place relative to the flashlight.

35. A flashlight as claimed in claim 31 including a washer disposed between the deformable portion and an inner wall of the flashlight housing.
36. A flashlight as claimed in any one of claims 31 to 35 wherein the flashlight electrical contact and the contact connection means are a unitary component.
- 5 37. A flashlight as claimed in claim 36 wherein the unitary component is in the form of a rivet.
38. A flashlight as claimed in any one of claims 31 to 37 wherein the shoulder is defined by a flange.
39. A flashlight as claimed in any one of claims 31 to 38 wherein the flashlight housing defines a recess having a recess floor, the flashlight electrical contact being disposed within the recess
10 and projecting from the contact aperture and outwardly from the recess floor.